

10/501153

501/153  
(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
4 September 2003 (04.09.2003)

PCT

(10) International Publication Number  
WO 03/073533 A1

(51) International Patent Classification<sup>7</sup>: H01M 2/14,  
2/16, 2/18, 8/02, 8/24

(21) International Application Number: PCT/AU03/00235

(22) International Filing Date: 26 February 2003 (26.02.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
PS 0765 26 February 2002 (26.02.2002) AU  
PCT/AU02/00939 13 July 2002 (13.07.2002) AU

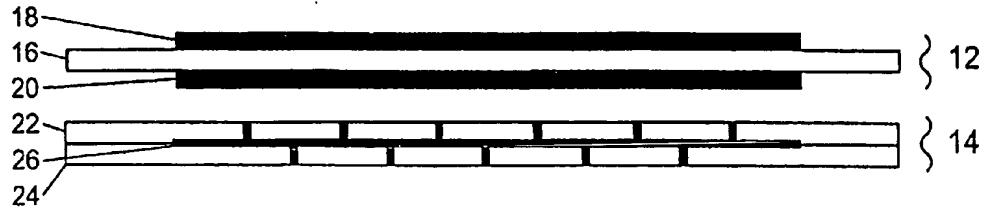
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(54) Title: A FUEL CELL GAS SEPARATOR



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(57) Abstract: A fuel cell gas separator (14) between two planar solid oxide fuel cells (12) comprises a first layer (22) which is formed of a material that is impermeable to gases, a second layer (24) which is formed of a material that is impermeable to gases. The first and second layers have perforations (28) through their thickness which are closed by electrically conductive plug material (30). A third intermediate layer (26) between the first and second layers is electrically conductive and is in electrical contact with the plug material in the perforations through the first and second layers. The perforations in the first layer may be offset relative to the perforations in the second layer. The electrically conductive plug material in the perforations of the first and second layers may be the same, and may also be the same as the material of the third intermediate layer. The electrically conductive material may be silver or a silver-based material such as a silver-glass composite. Electrically conductive coatings may be provided over the electrode-contacting zones of the first and second layers.